

MINUTES OF THE  
MARICOPA ASSOCIATION OF GOVERNMENTS  
WATER QUALITY ADVISORY COMMITTEE MEETING

Tuesday, September 26, 2000  
MAG Office Building  
Phoenix, Arizona

MEMBERS ATTENDING

Roger Klingler, City of Scottsdale, Chairman  
Gene Michael for James Kaylor, City of Glendale  
Robert Hollander, City of Phoenix  
David McNeil, City of Tempe  
Ray Hedrick, Salt River Project  
Gene Cetwinski, Valley Forward  
Association  
Bill Haney, City of Mesa  
Dale Bodiya, Maricopa Environmental  
Services Department

Dave Siegel, City of Chandler  
Laura Watson, Citizen  
Representative  
John Boyer, Pinnacle West Capital  
Eugene Jensen, Citizen  
Representative  
Lonnie Frost, Town of Gilbert  
Esmeralda Avila, City of  
Avondale  
\*Ajay Shah, Motorola  
\*Kevin Kadlec, City of Peoria

\*Those members neither present nor represented by proxy.

OTHERS PRESENT

Cato Esquivel, City of Goodyear  
Steve Owen, Pacific Environmental  
Resources Corporation  
George Shirley, Carollo Engineers  
Mark Courtney, Carollo Engineers  
Todd Tupper, SunChase  
Jerry Rathke, Arizona Department  
Of Water Resources

Tom Reynolds, Arizona Department  
Of Transportation  
Jerry Ellsworth, SunCor  
Matt Garlick, Litchfield Park Service  
Company  
Steve Davis, Black & Veatch  
Brenda Geisen, Maricopa  
Association of Governments

1. Call to Order

A meeting of the MAG Water Quality Advisory Committee was conducted on September 26, 2000.  
Roger Klingler, Chairman, called the meeting to order.

2. Approval of the October 5, 1999 Meeting Minutes

The Committee reviewed the minutes from the October 5, 1999 meeting. Robert Hollander, City of Phoenix, moved and Lonnie Frost, Town of Gilbert, seconded, and it was unanimously carried to approve the minutes from the October 5, 1999 meeting.

3. Draft MAG 208 Water Quality Management Plan Amendment for the City of Goodyear/Litchfield Park Service Company Palm Valley and Sarival Water Reclamation Facilities

Roger Klingler, City of Scottsdale, Chairman, indicated that the City of Goodyear/Litchfield Park Service Company (LPSCo) Palm Valley and Sarival Water Reclamation Facilities are listed on the agenda for information, discussion and a possible authorization to conduct a public hearing on the Draft 208 Plan Amendment. Steve Owen, Pacific Environmental Resources Corporation (PERC), gave a presentation on the proposed facilities. Mr. Owen indicated that the City of Goodyear is requesting that the Palm Valley and the Sarival Water Reclamation Facilities be added to the MAG 208 Plan and that each proposed facility be identified to have an ultimate capacity of 8.2 million gallons per day (mgd) for a total capacity of 16.4 mgd.

Treated wastewater would be disposed of through reuse, recharge or discharge. The Palm Valley facility would be located on McDowell Road between Bullard Avenue and Litchfield Road. Mr. Owen indicated that this site was selected for its convenient proximity to golf courses, existing wastewater transport lines, and an existing pumping station. Each facility would be constructed in two phases of 4.1 mgd each. The Sarival facility would be located at Sarival Avenue and McDowell Road. Both facilities would be located within the City of Goodyear Municipal Planning Area.

The City of Avondale, Town of Buckeye, City of Litchfield Park, and Maricopa County are within three miles of the project. All of the jurisdictions have indicated that they do not object to the proposed facilities. Mr. Owen indicated that the City of Glendale is not located within a three mile radius, but they have no objections to the facilities accepting flow from a portion of the Glendale Wastewater Planning and Service Area, which is currently directed to the Casitas Bonitas Wastewater Treatment Facility.

Mr. Owen reported that public meetings had been conducted according to the conditions of the City of Goodyear to present the proposed project to interested residents of Palm Valley, Litchfield Park, Pebble Creek and surrounding communities. Mr. Owen indicated that five alternatives were studied and the City of Goodyear selected the construction of two new facilities to serve the Goodyear North Wastewater Planning and Service Area. Mr. Owen indicated that some of the flow currently directed to the Goodyear 157<sup>th</sup> Plant would be routed to the new Palm Valley facility.

Mr. Owen indicated that the design phase of the proposed Palm Valley facility is sixty percent complete. PERC would use a unique design in which treatment occurs in large basins under the facility itself with enclosed headworks, a pre-treatment basin, two sequencing batch reactor basins, sludge aerobic digestors, and sludge processing that takes place in the end building. Mr. Owen indicated that, unlike many facilities, the reactors for these facilities

would be enclosed for odor and noise control. Mr. Owen reported that ozone and filtration systems would be utilized, as well as UV for disinfection.

Mr. Owen reported that Class A sludge would be produced, as stipulated by the City of Goodyear, and hauled to an end user or landfill. Mr. Owen indicated that an ADEQ Certified Grade 4 Operator would provide start up operation and training for a period of six months at the Palm Valley facility. Mr. Owen provided an example of PERC's construction with a 1.5 mgd Lakeside California facility which looks like a typical commercial building with a small footprint, a certified lab room, a control room, and a conference room.

Mr. Owen indicated that the permits to be obtained include a National Pollutant Discharge Elimination System permit, an Approval to Construct, a Wastewater Reuse permit, and an EPA 503 Biosolids permit. Mr. Owen indicated that LPSCo would fund construction of the facilities, and that the 1999 LPSCo corporate financial statement is included in Appendix E of the draft amendment.

Robert Hollander asked if sequencing batch reactor technology is usually used by facilities with the kind of capacity proposed for these facilities.

Mr. Owen indicated that many facilities with capacities larger than 8.2 mgd utilize this technology. Mr. Owen indicated that many facilities in Florida utilize this technology and that one such facility won the EPA Award of Excellence on two occasions.

Mr. Hollander asked if PERC, as a design build operator, would provide training and operation services for the facilities after the initial six month period.

Mr. Owen indicated that PERC would only provide training and operation services for the facilities for the first six months of operation.

Eugene Jensen, Citizen Representative, indicated that facilities can be problematic and asked if an emergency plan had been considered in the design of the facilities.

Mr. Owen indicated an emergency plan had been designed into the proposed facilities with emergency storage and an adequate peaking factor.

Roger Klingler, Chairman inquired about the location of the recharge site for the facilities.

Mr. Owen referred the inquiry to Jerry Ellsworth, SunCor, who indicated that an injection well would be located either north or east of the facility, just outside the Superfund site. Mr. Ellsworth reported that, in order to take advantage of the recharge credits offered by the Arizona Department of Water Resources, significant efforts to conduct recharge would be made.

Lonnie Frost stated that the draft amendment identified disinfection by UV but, during his presentation, Mr. Owen had indicated that the facilities would use ozone for disinfection.

Mr. Owen indicated that the method of treatment may have changed from that identified in the draft amendment.

Dale Bodiya, Maricopa County Environmental Services Department, asked if the proposed facilities would be using UV or ozone for disinfection.

Mr. Owen indicated that a combination of UV and ozone may be used for disinfection.

Mr. Bodiya indicated that an air permit may also be needed from Maricopa County.

Mr. Owen indicated that he is aware of this possibility.

Bill Haney, City of Mesa, asked if the facilities would use carbon towers for the headworks facility. He indicated that the City of Mesa had used them and had experienced many problems with the technology. Mr. Haney stated that, once the carbon is depleted, they are not effective for odor control without total redundancy.

Mr. Owen indicated that the facility design has not been finalized. PERC would utilize primary and secondary treatment and use air within the plant to pull odor back down into the plant as scrubbing a method.

Mr. Bodiya asked if air from the sequencing batch reactor will also be captured and treated.

Mr. Owen indicated that it would.

Mr. Haney indicated that, when the design phase of a project is sixty percent complete, plans should be firmly nailed down on issues such as treatment method for odor control and disinfection.

Mr. Owen indicated that this will be done.

Chairman Klingler indicated that this agenda item was for information, discussion and possible authorization to conduct a public hearing on the Draft 208 Plan Amendment. As an employee of Pinnacle West Capital, John Boyer requested and was granted Chairman approval to abstain from the vote based on the fact that LPSCo is a subsidiary of this corporation. Mr. Hollander moved and Lonnie Frost seconded, and it was unanimously passed that a public hearing be conducted on the Draft 208 Plan Amendment for the City of Goodyear/LPSCo Palm Valley and Sarival Water Reclamation Facilities.

4. Draft MAG 208 Water Quality Management Plan Amendment for the City of Goodyear South Planning and Service Area

Chairman Klingler indicated the Draft MAG 208 Water Quality Management Plan Amendment for the City of Goodyear South Planning Area, which identifies the addition of the Lum Basin Water Reclamation Facility, an expanded capacity for the Waterman Basin Water

Reclamation Facility, and the expansion of the existing Corgett Basin Water Reclamation Facility, is listed on the agenda for information, discussion and a possible authorization to conduct a public hearing. Steve Davis, Black & Veatch, gave a presentation on the draft amendment.

Mr. Davis indicated that the City of Goodyear is requesting the addition of the Lum Basin facility, which would be located one mile east of Rainbow Valley Road, past the end of Narramore Road. The facility would have an ultimate capacity of 7.0 mgd. Mr. Davis reported that a siting study for the Waterman Basin facility is being conducted in which several sites along the Waterman Wash are being investigated. The facility would have an ultimate capacity of 22.0 mgd.

The Corgett Basin facility is located one half mile north of Elliot Road past the end of San Gabriel Road. Mr. Davis indicated that the Goodyear South Planning and Service Area is currently serviced solely by the 0.8 mgd current capacity of Corgett Basin facility, and the expansion to an ultimate 3.0 mgd capacity is expected to occur by 2020.

Excess reclaimed effluent from each of the three facilities would be reused through irrigation, recharged to the Waterman Basin, or discharged to either the Corgett Wash or Waterman Wash. Mr. Davis indicated that discharge to Lum Wash was not considered, due to the existence of many potable water wells located downstream. Mr. Davis indicated that the ultimate goal of the City of Goodyear is to conduct regional processing of sludge from all three facilities to Class A standards at the Waterman facility site.

Mr. Davis indicated that, in order to provide a more logical wastewater management planning system, the Goodyear North, Central and South Wastewater Planning and Service Areas are being revised to coordinate with the Corgett, Lum and Waterman drainage basins. Mr. Davis indicated that disparity exists between the MAG 1997 Population Projections of 16,033 and the current Goodyear Planning and Zoning projections of 169,402 for the Goodyear Planning Area. Mr. Davis indicated that a portion of this disparity can be accounted for with the newly identified growth of developments like Estrella Mountain Ranch, which is identified in the SunChase Master Plan.

Mr. Davis indicated that Sun Chase would provide initial funding for construction of the facilities, with ownership transferred to the City of Goodyear upon completion. In August of 2000, the Goodyear City Council approved a Community Facility Development District for funding of the project. Operation and maintenance will be funded through the collection of water and service area fees.

Mr. Hollander inquired about the projected build out date for each of the three facilities.

Mr. Davis indicated that build out dates of the facilities are dependent upon the economy and other factors that are difficult to predict. Estimates for growth of the SunChase and Estrella Mountain Ranch developments are realistic, and this growth alone will account for ninety-

five percent of the flows in the Corgett and Lum Basins. Growth estimates for development in the Waterman Basin are difficult to predict, as the design phase has not been initiated.

Chairman Klingler inquired about design plans for emergency treatment for each of the facilities.

Mr. Davis reported that the Corgett Basin facility would have a 1.0 emergency storage reservoir, and flows from the Lum Basin facility would be pumped to the Corgett Basin permitted discharge point. This would allow adequate time for plant operators to get an emergency situation under control. The design phase of the Waterman Basin facility has not been initiated, but Mr. Davis anticipates the emergency plan would be similar to that of the other facilities.

Chairman Klingler indicated that this agenda item was for information, discussion and possible authorization to conduct a public hearing on the Draft 208 Plan Amendment. Mr. Jensen moved, and Bill Haney seconded, and it was unanimously passed that a public hearing be conducted on the Draft MAG 208 Plan Amendment for the City of Goodyear South Planning and Service Area.

5. Update on the Revision to the MAG 208 Water Quality Management Plan

Chairman Klingler indicated that the update of the Revision to the MAG 208 Water Quality Management Plan is listed on the agenda for information and discussion. George Shirley of Carollo Engineers, consultant for MAG, gave a presentation to the Committee on the status of the Revision. Mr. Shirley reported that work on the Revision was initiated on April 5, 2000 and progress on the overall project is currently thirty-three percent complete. Mr. Shirley introduced Mark Courtney as a new member of the Carollo Engineers team, and indicated that Mr. Courtney has replaced Ms. Lisa Farrington as a professional engineer assigned to the project.

Mr. Shirley indicated that Carollo Engineers is comfortably working ahead of schedule, and it is anticipated that they will meet the contract completion date. Mr. Shirley stated that Carollo recognizes that certain portions of the revision may be impacted by the unknown outcome of upcoming legislative and regulatory action.

Mr. Shirley indicated that the draft Study Area Description has received MAG internal review and will be available for external review upon completion of incorporation of the comments received. The draft Water Resource Description is currently undergoing internal review by Carollo. Work on the Non Point Source Plan is twelve-percent complete, and a detailed outline is being developed. A questionnaire designed to encourage ideas for streamlining and improving the Plan is being developed for distribution to the MAG member agencies as part of the revision to the Management Planning Process section.

Mr. Shirley reported that the Point Source Plan, which identifies the desired wastewater planning configuration for each MAG jurisdiction over the twenty year planning horizon, is forty-percent complete. Carollo has utilized the data and information collected to produce a draft Point Source Planning Area Analysis for each MAG community. Each jurisdiction will have

the first opportunity to review the draft for their planning area. Mr. Shirley indicated that drafts have been completed for Paradise Valley, Scottsdale, Fountain Hills, Peoria, Surprise, Glendale, Tempe, Guadalupe, Chandler, Gilbert, Queen Creek, Tolleson and Phoenix.

Dale Bodiya asked if the County would be asked to review each of the Point Source Planning Area Analyses for the MAG jurisdictions.

Mr. Shirley indicated that Carollo and MAG would discuss this idea.

Chairman Klingler inquired about the estimated completion date of the Revision.

Mr. Shirley indicated that the contract completion date is March 31, 2002, but Carollo is comfortably working ahead of schedule at this point.

John Boyer, Pinnacle West Capital, inquired about when the drafts chapters of the Revision will be available for review by the Committee.

Mr. Shirley indicated that the draft chapters will be made available to the MAG committees for review according to the contract scope of work, and indicated where these points are identified by red diamonds on the project schedule presentation slide.

6. Arizona Department of Transportation (ADOT) Presentation on Potential Conservation Measures For Water Use On MAG Region Freeways

Chairman Klingler indicated that a presentation by ADOT on the potential conservation measures for water use on MAG Region Freeways is listed on the agenda for information and discussion. Tom Reynolds, ADOT Roadside Development Section, gave the presentation to the Committee. Generally, ADOT and the municipal members of MAG have worked together to develop landscape areas and amenities along many frontage roads, cross streets, and other areas. MAG cities provide water for roadside landscaping at no cost, in exchange for design, construction and maintenance of the landscape by ADOT.

Mr. Reynolds indicated that, as an example to other roadside design landscape consultants, ADOT wishes to elevate the standards for conservation practices in roadside landscape management and design with five pro-active commitments to the local government partners. These commitments include species specific annual water budgets at maturity, targeted dripper emission uniformities at construction, reclaimed water reuse criteria to insure a win-win for everyone, topsoil plating, and ET-based irrigation scheduling.

Mr. Reynolds indicated that the primary concerns of ADOT include a scarcity of ADOT funding for this issue, the fact that contractors may not be sensitized to the pitfalls of the non-uniformity of current standards, and a potential negative financial impact of using reclaimed water for roadside landscape maintenance. Mr. Reynolds indicated that ADOT is hopeful that the MAG cities will place more emphasis on water conservation through a call for reclaimed water as a prominent supply source for irrigation of the roadside landscape.

Mr. Jensen asked how ADOT interfaces with the Phoenix Active Management Area.

Mr. Reynolds indicated that he felt the Phoenix AMA Third Management Plan could have been more pointed on this issue. He stated that this issue is about Best Management Practices, and some would think this should be addressed by management. Mr. Reynolds indicated under the current system, design issues are addressed by designers and maintenance issues are addressed by managers. Mr. Reynolds stated that designers and managers should work together on design and maintenance issues.

Mr. Bodiya asked if ADOT is currently accepting reclaimed water from anyone.

Mr. Reynolds reported that ADOT has been accepting reclaimed water from Tucson Water Company for three years. He stated that ADOT has been able to benefit from the convenient proximity of the Tucson plant, which allows high pressure flow and chlorine residue to prevent clogging of the ADOT transport system. Mr. Reynolds cited the potential for salt build up as a concern for ADOT if reclaimed water were to be used in the Phoenix Metropolitan area.

Mr. Haney indicated that there is not great cause for concern, as the City of Mesa has had great results with use of reclaimed water on many golf courses and turf facilities.

Mr. Reynolds indicated ADOT would like to have both potable and reclaimed water available, and that this decision would have to be made by the MAG cities as the water supplier.

Mr. Haney asked ADOT to consider the perspective of the municipalities as the supplier, by recognizing that treatment of Central Arizona Project supply is far more costly than treatment of effluent for reuse purposes.

Mr. Reynolds indicated that ADOT would benefit from the positive public relations that would result from the use of reclaimed water on roadside landscapes.

## 7. Call to the Public

An opportunity was provided to members of the public to address the Water Quality Advisory Committee. No comments were presented.